REMARKS

In the Office Action, claims 1-7 and 23-40 were withdrawn from consideration. Claims 11-22 were rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent 4,564,945 to Glover, et al. (Glover) in view of United States Patent 5,392,299 to Rhines, et al. (Rhines).

In this Amendment, Applicants have amended claims 12-13 and 21-22, and withdrawn claims 1-7 and 23-40. Applicants have not added any claim. Accordingly, claims 11-22 will be pending in the application upon entry of this Amendment.

I. Restriction Requirement

In the Office Action, claims 1-7 and 23-40 were withdrawn from consideration under the restriction requirement dated March 30, 2005. Applicants' traversal of the restriction requirement was acknowledged. Hence, in this Amendment, Applicants have updated the listing of claims to reflect the "withdrawn" status of claims 1-7 and 23-40.

II. Rejection of Claims 11-22 under §103(a)

Claims 11-22 were rejected under §103(a) as being unpatentable over Glover in view of Rhines. Claims 12-22 are dependent on claim 11. Claim 11 recites a method that encodes a block of data. The block of data has n-dimensions and is received from an input source. The block contains several information bits. The method receives a row of the block and immediately outputs the row. The method encodes the information bits in the row. A first set of encoded data is generated according to a first encoding scheme. The method outputs the first set of encoded data. The method encodes the information bits in a column according to a second encoding scheme. A second set of encoded data is generated and iteratively updated according to the information bits in the row. The method hyper-diagonally encodes the information bits in the block according to a parity encoding scheme. A hyper set of encoded data is generated according to the information bits in the row and column and the first and second sets of encoded data. The method outputs the second set of encoded data after all the information bits and all subsequent first sets of encoded data are outputted. The method outputs the hyper set of encoded data.

Applicants respectfully submit that Glover, Rhines, and their hindsight, piecemeal combination do not disclose, teach, or even suggest such a method. The newly cited portion of Glover consists entirely of the following:

"Next, two Reed/Solomon redundancy bytes are added to each row to form columns 30 and 31. Then two Reed/Solomon redundancy bytes are added to each column to form rows 30 and 31. Thirty data blocks, so prepared, are processed according to Reed/Solomon algorithm to obtain two redundancy blocks, which completes a 32 block data field. The completed data field contains Reed/Solomon single-error-correcting code words in the row, column, and block dimensions." [Glover at column 4, lines 9-19.]

Hence, Glover does not disclose, teach, or even suggest several limitations recited in claim 11. For instance, the cited portion of Glover does not disclose, teach, or even suggest a method that generates a hyper set of encoded data according to the information bits in the (1) row and (2) column, and the (3) first set of encoded data and (4) second set of encoded data. Further, the Examiner states on page 5 of the Office Action: "However, Glover does not explicitly teach the specific use of hyper-diagonal encoding."

Accordingly, because of the defects in Glover, the Examiner cites Figures 4A, 4B and 5 in Rhines. Respectfully, Applicants submit that the cited figures in Rhines also do not disclose, teach, or even suggest several limitations recited in claim 11, such as, for instance, a method that generates a hyper set of encoded data according to the information bits in the row, column, and the first and second sets of encoded data. In contrast, the cited Figures 4-5 in Rhines show "orthogonal interleaving," which is described in the (uncited) accompanying description as shuffling rows between three data planes to achieve interleaving. Further, in the Office Action dated June 01, 2005, the Examiner previously stated: "However, Rhines does not explicitly teach the specific use of hyper set of encoded data generated based on second sets of encoded data, that is, an arrangement whereby the first encoder in a set of serially concatenated encoders is a row encoder, the second encoder is a column encoder and the third is a hyper encoder."

Hence, Applicants respectfully submit that the cited references, taken separately or in hindsight, piecemeal combination, do not disclose, teach, or even suggest each and every limitation recited in claim 11, as is necessary to sustain a rejection under §103(a).

Moreover, Applicants respectfully submit that the cited Abstract in Rhines lacks a motivation to combine with Glover. Rhines' Abstract states, in pertinent part: "The first interleave is an orthogonal row shuffling interleave that provides enhanced protection against burst errors." The interleaving in Rhines is performed for rapid channel transmission. Whereas, Glover is directed to data redundancy for recordation on a video disc, which is

distinguishable from Rhines' stated purpose and means. See Glover's Abstract. Further, Glover and Rhines were filed and issued almost ten years apart. Thus, Applicants respectfully submit that the combination of Glover and Rhines comprises impermissible hindsight.

Accordingly, Applicants respectfully submit that Glover, Rhines, and their impermissible hindsight, piecemeal combination do not render unpatentable claim 11. Since claims 12-22 are dependent on claim 11, Applicants respectfully submit that the cited references and their hindsight combination do not invalidate claims 12-22 for at least the reasons discussed above in relation to claim 11. In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the §103(a) rejection of claims 11-22.

CONCLUSION

Applicants respectfully submit that all pending claims, namely claims 11-22, are in condition for allowance. Reconsideration of the objections and rejections is requested. Examination and allowance are earnestly solicited at the earliest possible date. Should the Examiner have any questions or comments, the Examiner is encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
HAVERSTOCK & OWENS LLP

Dated: 3-6-06

By: _____
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CERTIFICATE OF MAILING (37 CFR§ 1.8(a))

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450

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